



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,383	02/06/2004	Kazuya Umcyama	118582	5750
25944	7590	09/10/2007	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			QUIETT, CARRAMAH J	
		ART UNIT	PAPER NUMBER	
		2622		
		MAIL DATE	DELIVERY MODE	
		09/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/772,383	UMEYAMA, KAZUYA
	Examiner	Art Unit
	Carramah J. Quiett	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 February 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 February 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>000000000000</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2622

DETAILED ACTION

Response to Amendment

1. The preliminary amendment(s), filed on 03/23/2004 and 06/25/2004, have been entered and made of record. Claims 1-24 are pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statements (IDS), filed on 03/23/2004 and 05/07/2004, have been placed in the application file, and the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-24** are rejected under 35 U.S.C. 102(e) as being anticipated by Miyatake et al. (US 6750903).

For **claim 1**, Miyatake discloses an electronic camera (fig. 1) having a multi-shooting mode in which data of a composite image is generated by arranging and compositing data of a predetermined number of frame images generated by continuous shooting (col. 3, lines 44-65), comprising:

a first switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs start of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
a second switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs end of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
an image pickup (fig. 1) that performs the continuous shooting according to an operation to said first and second switches to generate data of a plurality of frame images in said multi-shooting mode (col. 3, line 66 – col. 4, line 43);
a controller (fig. 1) that changes an extracting rate according to the number of images generated by said image pickup, and extracts the data of the predetermined number of frame images from the data of the plurality of frame images according to the changed extracting rate and as a result of the operation of said second switch; (col. 4, lines 44-61), and
the controller arranges and composites the data of the predetermined number of frame images extracted by said controller to generate the data of the composite image as a result of the operation of said second switch (col. 7, lines 25-67). Please see figs. 1-4

For **claim 2**, Miyatake discloses the electronic camera according to Claim 1, wherein said controller performs the extraction at such intervals that intervals at which frame images in extracted data have been shot become substantially uniform (col. 5, lines 13-28). Please see figs. 5-6.

For **claim 3**, Miyatake discloses an electronic camera (fig. 1) having a multi-shooting mode in which data of a composite image is generated by arranging and compositing data of a predetermined number of frame images generated by continuous shooting (col. 3, lines 44-65), comprising:

- a first switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs start of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
- a second switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs end of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
- an image pickup (fig. 1) that performs the continuous shooting according to an operation to said first and second switches to generate data of a plurality of frame images in said multi-shooting mode (col. 3, line 66 – col. 4, line 43);
- a controller that calculates a difference between frame images in the data of the frame images generated by said image pickup, the difference representing an amount of variation in an object (col. 4, lines 44-61);
 - the controller extracts data of the predetermined number of frame images from the data of the plurality of frame images at such intervals that the smaller the difference between the frame images, the longer the intervals (col. 4, lines 44-61); and
 - the controller arranges and composites the data of the predetermined number of frame images extracted by said controller to generate the data of the composite image as a result of the operation of said second switch (col. 7, lines 25-67). Please see figs. 1-4.

For claim 4, Miyatake discloses the electronic camera according to Claim 3, wherein said controller extracts the data of the predetermined number of frame images in ascending order of the calculated differences (col. 4, lines 44-61).

For claim 5, Miyatake discloses an electronic camera (fig. 1) having a multi-shooting mode in which data of a composite image is generated by arranging and compositing data of a predetermined number of frame images generated by continuous shooting (col. 3, lines 44-65), comprising:

- a first switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs start of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
- a second switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs end of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
- an image pickup (fig. 1) that performs the continuous shooting according to an operation to said first and second switches to generate data of a plurality of frame images in said multi-shooting mode (col. 3, line 66 – col. 4, line 43);
- a controller (fig. 1) that selects the data of at least the predetermined number of frame images from the data of the plurality of frame images according to the number of frame images generated by said image pickup, and calculates a difference between frame images in the selected data, the difference representing an amount of variation in an object (col. 4, lines 44-61);
 - the controller extracts the data of the predetermined number of frame images from the data of the plurality of frame images at such intervals that the smaller the difference between the frame images, the longer the intervals (col. 4, lines 44-61); and

the controller arranges and composites the data of the predetermined number of frame images extracted by said controller to generate the data of the composite image, as a result of the operation of said second switch (col. 7, lines 25-67). Please see figs. 1-4.

For claim 6, Miyatake discloses an electronic camera (fig. 1) having a multi-shooting mode in which data of a composite image is generated by extracting data of a predetermined number of frame images from data of a plurality of frame images generated by continuous shooting, and by compositing the extracted data of the frame images (col. 4, lines 44-61), comprising:

a first switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs start of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);

a second switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs end of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);

an image pickup (fig. 1) that performs the continuous shooting according to an operation to said first and second switches to generate data of a plurality of frame images in said multi-shooting mode (col. 3, line 66 – col. 4, line 43);

a controller that extracts the data of the predetermined number of frame images from the data of the plurality of frame images in said multi-shooting mode at such intervals that an Nth frame image data to be extracted is generated by shooting at a time of an Xth power of $(N-1)$ where X is more than zero when a first frame image data to be extracted is assumed to be generated by shooting at a time zero; and (col. 7, lines 25-67). Please see figs. 3-4.

the controller arranges and composites data of the predetermined number of frame images extracted by said controller to generate the data of the composite image (col. 4, lines 44-61).

For claim 7, Miyatake discloses an electronic camera (fig. 1) having a multi-shooting mode in which data of a composite image is generated by arranging and compositing data of a predetermined number of frame images generated by continuous shooting (col. 3, lines 44-65), comprising:

a first switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs start of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
a second switch (fig. 1, ref. 112/fig. 2, ref. 202) that instructs end of the continuous shooting in said multi-shooting mode (col. 5, lines 21-28; col. 6, lines 28-44);
an image pickup (fig. 1) that performs the continuous shooting according to an operation to said first and second switches to generate data of a plurality of frame images in said multi-shooting mode (col. 3, line 66 – col. 4, line 43);
a controller that extracts data of the predetermined number of frame images from the data of a plurality of frame images in said multi-shooting mode in such a manner that the data extracted includes data of frame images shot at the start and end of the continuous shooting (col. 4, lines 44-61); and
the controller arranges and composites the data of the predetermined number of frame images extracted by said controller to generate the data of the composite image as a result of the operation of said second switch (col. 7, lines 25-67). Please see figs. 1-4.

For claim 8, Miyatake discloses the electronic camera according to Claim 7, wherein the controller changes an extracting rate according to the number of frame images generated by said image pickup and extracts the data of the predetermined number of frame images from the generated data of the frame images according to the changed extracting rate (col. 4, lines 44-61).

For claim 9, Miyatake disclose the electronic camera according to claim-Claim 7, wherein the controller calculates a difference between frame images of the generated data of the frame images, the difference representing an amount of variation in an object, and wherein said controller extracts the data of the predetermined number of frame images from the data of the plurality of frame images at such intervals that the smaller the difference between the frame images, the longer the intervals (col. 7, lines 25-67). Please see figs. 1-4.

Claims 10, 11, 12, 13, and 14 are method claims corresponding to apparatus claims 1, 3, 5, 6, and 7, respectively. Therefore, claims 10, 11, 12, 13, and 14 are analyzed and rejected as previously discussed with respect to claims 1, 3, 5, 6, and 7, respectively.

For claim 15, Miyatake disclose the electronic camera according to Claim 1, wherein said first and second switches constitute a single mechanism (col. 6, lines 28-44).

For claim 16, Miyatake disclose the electronic camera according to Claim 1, wherein said first and second switches constitute different mechanisms (col. 5, lines 21-28; col. 6, lines 28-44).

Claims 17 and 18 are apparatus claims corresponding to apparatus claims 15 and 16, respectively. Therefore, claims 17 and 18 are analyzed and rejected as previously discussed with respect to claims 15 and 16, respectively.

Claims 19 and 20 are apparatus claims corresponding to apparatus claims 15 and 16, respectively. Therefore, claims 19 and 20 are analyzed and rejected as previously discussed with respect to claims 15 and 16, respectively.

Claims 21 and 22 are apparatus claims corresponding to apparatus claims 15 and 16, respectively. Therefore, claims 21 and 22 are analyzed and rejected as previously discussed with respect to claims 15 and 16, respectively.

Claims 23 and 24 are apparatus claims corresponding to apparatus claims 15 and 16, respectively. Therefore, claims 23 and 24 are analyzed and rejected as previously discussed with respect to claims 15 and 16, respectively.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakayama et al. (US 5111540)	A motion diagnosis system with a camera and which picks up motions of a subject.
Miyatake et a. (US 6466262)	A digital wide camera forming a wide view still image from a dynamic sequence of images generated during a recording operation.
Tantalo et al. (US 6891570)	Method for deriving exposure time and frame rate from image motion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CJQ
August 31, 2007



NGOC-YEN VU
SUPERVISORY PATENT EXAMINER